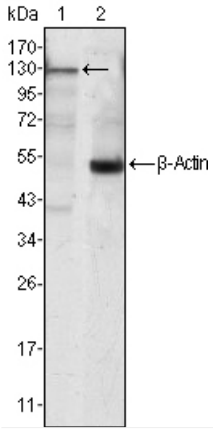
JAK3 Monoclonal Antibody

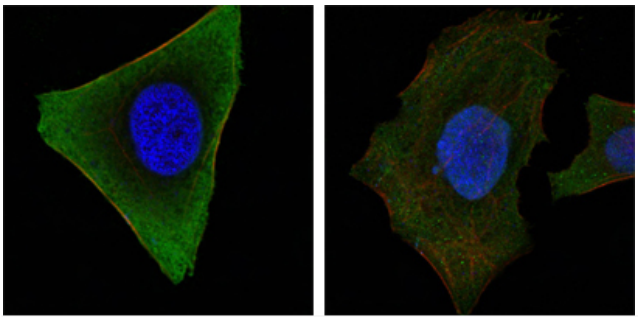
Catalog No	BYab-14165
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IF;FCM;ELISA
Gene Name	JAK3
Protein Name	Tyrosine-protein kinase JAK3
Immunogen	Purified recombinant fragment of human JAK3 expressed in E. Coli.
Specificity	JAK3 Monoclonal Antibody detects endogenous levels of JAK3 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	JAK3; Tyrosine-protein kinase JAK3; Janus kinase 3; JAK-3; Leukocyte janus kinase; L-JAK
Observed Band	
Cell Pathway	Endomembrane system ; Peripheral membrane protein . Cytoplasm .
Tissue Specificity	In NK cells and an NK-like cell line but not in resting T-cells or in other tissues. The S-form is more commonly seen in hematopoietic lines, whereas the B-form is detected in cells both of hematopoietic and epithelial origins.
Function	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:Defects in JAK3 are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-negative (T(-)B(+)NK(-)SCID) [MIM:600802]. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients with SCID present in infancy with recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.,domain:Possesses two phosphotransferase domains. The second

	one probably contains the catalytic domain (By similarity), while the presence of slight differences suggest a different role
Background	The protein encoded by this gene is a member of the Janus kinase (JAK) family of tyrosine kinases involved in cytokine receptor-mediated intracellular signal transduction. It is predominantly expressed in immune cells and transduces a signal in response to its activation via tyrosine phosphorylation by interleukin receptors. Mutations in this gene are associated with autosomal SCID (severe combined immunodeficiency disease). [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

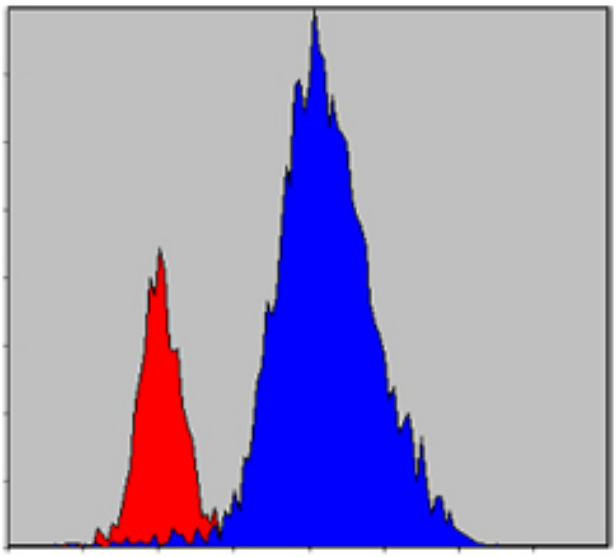
Products Images



Western Blot analysis using JAK3 Monoclonal Antibody against Jurkat cell lysate (1).



Confocal immunofluorescence analysis of Hela (left) and HepG2 (right) cells using JAK3 Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Hela cells using JAK3 Monoclonal Antibody (blue) and negative control (red).